

Amendments to Claims

In the amended claims, added words are underlined and deleted terms are crossed out.

Claim 1 (Currently amended): A wood preservative composition comprising an aqueous solution of:

- a. a copper complex of a chelating compound comprising at least two functional groups selected from the group consisting of amidoxime, hydroxamic acid, thiohydroxamic acid, N-hydroxyurea, N-hydroxycarbamate, and N-nitroso-alkyl-hydroxylamine; and
- b. ammonia, ethanolamine, or pyridine in an amount sufficient to solubilize the copper complex.

Claim 2 (Currently amended): The wood preservative composition of Claim 1, wherein the ~~chelating compound comprises~~ at least two functional groups ~~selected from amidoxime and hydroxamic acid, and the~~ are amidoxime or hydroxamic acid is derived from a cyanoethylated compound.

Claim 3 (Original): The wood preservative composition of Claim 2, wherein the cyanoethylated compound is derived from the cyanoethylation of:

- a. a primary amine, a secondary amine, blood albumin, casein, gelatin, gluten, soybean protein, wool, or corn zein; or
- b. materials derived from blood albumin, casein, gelatin, gluten, soybean protein, wool, or corn zein.

Claim 4 (Currently amended): The wood preservative composition of Claim 2, wherein the cyanoethylated compound is derived from the cyanoethylation of synthetic polymers selected from the group consisting of acetone-formaldehyde condensate; acetone-isobutyraldehyde condensate; methyl ethyl ketone-formaldehyde condensate; poly(allyl alcohol); poly(crotyl alcohol); poly(3-chloroallyl alcohol); ethylene-carbon monoxide copolymers; polyketone from propylene, ethylene and carbon monoxide; poly(methallyl alcohol); poly(methyl vinyl ketone); and poly(vinyl alcohol).

Claim 5 (Currently amended): The wood preservative composition of Claim 2, wherein the cyanoethylated compound is obtained from the cyanoethylation of materials selected from the group consisting of:

- a. alcohols, carbohydrates, dextran, dextrin, gums, starches, modified natural polymers; and
- b. compounds derived from natural polymers.

Claim 6 (Original): The wood preservative composition of Claim 2, wherein the cyanoethylated compound is obtained from the cyanoethylation of sucrose or sorbitol.

Claim 7. (Currently amended): The wood preservative composition of Claim 5, wherein the gums are selected from the group consisting of guar, locust bean, honey locust, flame tree, tara, arabic, tragacanth, and karaya gums.

Claim 8 (Currently amended): The wood preservative composition of Claim 5, wherein the starches are selected from the group consisting of starches derived from corn, potato, tapioca, or wheat.

Claim 9 (Currently amended): The wood preservative composition of Claim 5, wherein the modified natural polymers are selected from the group consisting of regenerated cellulose, cellulose xanthate, dimethylthiourethane of cellulose, ethyl cellulose, ethylthiourethane of cellulose, hydroxyethylcellulose, methylcellulose, and phenylthiourethane of cellulose.

Claim 10 (Currently amended): The wood preservative composition of Claim 5, wherein the natural polymer is selected from the group consisting of flax, jute, sisal, and manila.

Claim 11 (Original): The wood preservative composition of Claim 1, wherein the chelating compound comprises at least two amidoxime or hydroxamic acid groups, and the chelating compound is derived from polyacrylonitrile, or from a copolymer of acrylonitrile and vinyl monomers.

Claim 12 (Original): The wood preservative composition of Claim 1, wherein the chelating compound comprises at least two hydroxamic groups and the chelating compound is derived from styrene-maleic anhydride or poly(vinylmethylether/maleic anhydride) copolymers.

Claim 13 (Currently amended): A process for preparing a copper complex, comprising:

- a. forming an aqueous mixture of a cyanoethylation catalyst and an alcohol or amine;
- b. adding an unsaturated nitrile to the aqueous mixture of (a) and allowing the unsaturated nitrile to react with the alcohol or amine to form a first aqueous solution;
- c. adding i) a source of hydroxylamine, and ii) together with ammonium hydroxide, ethanolamine, or pyridine to the first aqueous solution of step (b) to form a second aqueous solution; and
- d. adding a source of Cu(II) to the second aqueous solution of step (c) to form a copper complex.

Claim 14 (Original): The process of Claim 13, wherein the alcohol is sucrose or sorbitol.

Claim 15 (Original): The process of Claim 13, wherein the amine is a primary or secondary amine having 1 to 30 carbon atoms, or is polyethyleneamine.

Claim 16 (Original): The process of Claim 13, wherein the source of hydroxylamine is hydroxylamine, hydroxylamine hydrochloride, or hydroxylamine sulfate.

Claim 17 (Original): The process of Claim 13, wherein the cyanoethylation catalyst is a catalytically effective amount of lithium hydroxide, sodium hydroxide, or potassium hydroxide.

Claim 18 (Original): The process of Claim 13, wherein the unsaturated nitrile is acrylonitrile.

Claim 19 (Currently amended): The process of Claim 13, wherein the source of copper is selected from the group consisting of copper sulfate, copper sulfate pentahydrate, cupric chloride, cupric acetate, and basic copper carbonate.

Claim 20 (Currently amended): A process for preparing a wood preservative composition, comprising contacting an aqueous solution comprising a copper salt,

at least one chelating compound comprising at least two functional groups selected from the group consisting of amidoxime, hydroxamic acid, thiohydroxamic acid, N-hydroxyurea, N-hydroxycarbamate, and N-nitroso-alkyl-hydroxylamine, with ammonia, ethanolamine, or pyridine.

Claim 21 (Currently amended): A process for preserving an article, comprising contacting an article selected from the group consisting of wood, lumber, plywood, oriented strand board, cellulose, hemicellulose, lignin, cotton, or paper with the wood preservative composition of Claim 1.

Claim 22 (Original): The process of Claim 21, wherein contacting comprises dipping, brushing, spraying, draw-coating, rolling, or pressure-treating.

Claim 23 (Original): The process of Claim 21, wherein the article is wood or lumber.

Claim 24 (Original): The process of Claim 21, further comprising subjecting the wood or lumber to vacuum both before and after contacting the wood or lumber with the wood preservative composition of Claim 1.

Claim 25 (Original): An article treated with the wood preservative composition of Claim 1.

Claim 26 (Currently amended): The article of Claim 25, wherein the article is selected from the group consisting of wood, paper, cellulose, cotton, lignin, and hemicellulose.

Claim 27 (Currently amended): An article ~~selected from the group of~~ comprising:
a) wood, lumber, plywood, oriented strandboard, paper, cellulose, cotton, lignin and or hemicellulose; ~~further comprising~~
b) ~~copper~~ copper; and
c) at least one chelating compound, wherein the chelating compound comprises at least two functional groups selected from the group consisting of amidoxime, hydroxamic acid, thiohydroxamic acid, N-hydroxyurea, N-hydroxycarbamate, and N-nitroso-alkyl-hydroxylamine.